



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,537	10/16/2003	Hyun-kwon Chung	1793.1075	4036
49455	7590	07/23/2009	EXAMINER	
STEIN MCEWEN, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			ZHEN, LI B	
			ART UNIT	PAPER NUMBER
			2194	
			NOTIFICATION DATE	DELIVERY MODE
			07/23/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptomail@smiplaw.com

Office Action Summary	Application No. 10/686,537	Applicant(s) CHUNG ET AL.	
	Examiner LI B. ZHEN	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,10,11 and 14-36 is/are pending in the application.
- 4a) Of the above claim(s) 14-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/17/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 3, 5 – 7, 10, 11 and 14 – 36 are pending.

Information Disclosure Statement

2. The information disclosure statement filed 2/17/2009 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each NPL publication (reference AG) listed that is not in the English language. The NPL publication has been placed in the application file, but it has not been considered.

Election/Restrictions

3. Newly submitted claims 14 – 36 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: new claims 14-24 of the present application respectively correspond to a separate and distinct invention described in claims 1-3, 6-8, 12, 13, 28, 23, and 24 of Application No. 10/686,521 and new claims 25-36 of the present application respectively correspond to a separate and distinct invention described in original claims 1-4, 6-9, 11, 12, 14, and 15 of Application No. 10/685,697.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 14 – 36 are withdrawn from

Art Unit: 2194

consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Should applicant traverse on the ground that the claims recited in the copending applications and the examined application claims are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the claims in the copending applications and the examined application claims to be obvious variants or clearly admit on the record that this is the case.

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

5. In traversing the rejections of claims 1-3, 5-7, 10 and 11 under 35 USC 112, applicant referenced figures 4, 5 and 18 and paragraph [0073] of the specification. Figures 4, 5 and 18 identified files with the VOB extension (Video Object files) as examples of AV data. According to paragraph [0073] of the specification, the markup document includes binary data such as image data, audio data, or a Java program. As disclosed, AV data is directed to multiplexed audio and video data (i.e. Video Object files) and the markup documents, at best, include image and audio data. Thus, the limitation "wherein the markup document does not comprise the AV data or any other AV data" is supported by the specification and rejection under 35 USC 112 is withdrawn.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1 – 3 and 5 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al. (US 6,580,870 B1; "Kanazawa") in view of Jones et al. (US 2003/0220984 A1; "Jones") and further in view of Lamkin et al (US 7,448,021 B1; "Lamkin").**

8. As to claim 1, Kanazawa teaches a computer-readable storage medium usable with an apparatus comprising a buffer (abstract; col. 14 lines 40 – 54), the computer-readable storage medium having recorded thereon:

audio video (AV) data (abstract);

a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus, wherein the markup document does not comprise the AV data or any other AV data (col. 15 lines 34 – 56; col. 17 lines 31 – 38; col. 20 lines 18 – 22); and

the apparatus to identify buffering state information of the markup document to be preloaded into the buffer of the apparatus, the buffering state information being used

Art Unit: 2194

by the apparatus in reproducing the AV data in the interactive mode selected by the user (col. 15 lines 34 – 56; col. 17 line 64 – col. 18 line 23).

Although Kanazawa teaches the ability to identify the buffering state, it does not specifically teach that the identification is enabled by control information as claimed.

However, Jones teaches the identification is enabled by control information providing functionality (§¶66, 68). It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Kanazawa teaches identifying the buffering state and Jones teaches a way to enable identification of the buffering state that can be used when implementing the disclosure of Kanazawa. Although Jones discloses that the control information may be stored on computer-readable medium such as a DVD, Jones does not specifically disclose storing the control information on a computer-readable medium that also includes AV data and a markup document.

However, Lamkin teaches a method for combining video/audio content with programmatic content (e.g. web pages) and software (col. 6, lines 4 – 61 and col. 8, lines 37 – 44). Lamkin also teaches that additional directories, runtime software, and programmatic content are added to the above directory structure, as needed, in order to support additional hardware/software platforms, such as different types of personal computers and/or different operating systems, and consumer electronic devices, e.g., set top boxes and the like (col. 6, lines 55 – 62). As suggested by Lamkin, one of ordinary skill in the art would have been motivated to include control information as taught by Jones into the computer-readable medium (which includes AV data and

Art Unit: 2194

markup documents) of Kanazawa. One of ordinary skill in the art would have been motivated to make the combination because this ensures that different types of personal computers and consumer electronic devices would have the necessary software to process the extra features (e.g. interlocking DVD video with HTML files) stored on the computer-readable medium.

9. As to claim 2, Kanazawa as modified teaches the control information comprises an application program interface (API) that generates a report signal used to identify a buffering state of the markup document (Jones: ¶¶66, 68).

10. As to claim 3, Kanazawa as modified (see rejections of claims 1 and 2) teaches the control information comprises an [obj].isCached(URL, resType) API that generates a report signal, where the URL is a parameter indicating a file path of the markup document and the resType is a parameter indicating an attribute of the markup document (Kanazawa: col. 15 lines 34 – 56; col. 17 line 64 – col. 18 line 23 and Jones: ¶¶66, 68). Kanazawa teaches determining whether a HTML file has been changed (steps S404 to S407; col. 17 line 64 – col. 18 line 23) but does not disclose the use of an API call. Jones discloses making an API call to determine whether a file is already located local to the client (paragraph 0068). The API call in Jones corresponds to the claimed isCached API and the URL and resType are interpreted as input parameters that are used to identify the markup document. The combination of Kanazawa and

Art Unit: 2194

Jones would also include similar parameters in order to uniquely identify each HTML file.

11. As to claim 5, Kanazawa as modified teaches the control information comprises an API that generates a fetch signal used to issue a command to preload the markup document (Kanazawa: col. 15 lines 34 – 56; col. 17 line 64 – col. 18 line 23).

12. As to claim 6, Kanazawa as modified teaches the API returns a response indicating whether the command to preload the markup document has been successfully transmitted using the fetch signal (Kanazawa: col. 15 lines 34 – 56; col. 17 line 64 – col. 18 line 23).

13. As to claim 7, Kanazawa as modified teaches the control information comprises an API that is used to determine whether preloading of the markup document is completed (Jones: ¶¶66, 68).

14. **Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa in view of Jones and Lamkin and further in view of US 20020088011 A1 (“Collart”).**

15. As to claim 10, Kanazawa teaches the interactive mode is a mode in which the AV data is interlocked with the markup document (col. 15 lines 32 – 45 and col. 11, lines

Art Unit: 2194

5 – 16); the apparatus is selectively operable in the interactive mode in which the AV data is interlocked markup document, and a non interactive video mode in which the AV data is displayed in the same manner as AV data recorded on a standard DVD (col. 6 lines 36 – 42; col. 15 lines 34 – 56); and the user of the apparatus selects between the interactive mode and the non interactive video mode (col. 15 lines 34 – 45). Kanazawa does not disclose the interactive mode is a mode in which the AV data is displayed in a display window defined by the markup document.

However, Collart teaches the interactive mode is a mode in which the AV data is displayed in a display window defined by the markup document (paragraphs 0117, 0121 – 0125) and the user of the apparatus selects between the interactive mode and the non interactive video mode (paragraph 0108).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine these teachings because this creates HTML-enhanced DVD-Video/Audio content that can play reliably across multiple playback platforms, ranging from computers to Internet-connected set-top devices (paragraph 0053 of Collart). This also allows content developers to create products that seamlessly combine the Internet and/or other DVD-ROM capabilities with DVD-Video to create a richer, more interactive, and personalized entertainment experience for their customers (paragraph 0054 of Collart).

16. As to claim 11, Kanazawa as modified teaches a startup markup document (Collart: paragraph 0101) separate from the markup document to be preloaded into the

Art Unit: 2194

buffer of the apparatus and comprising preloading instructions enabling the apparatus to preload the markup document (Collart: paragraphs 0105, 0217 and 0219) into the buffer of the apparatus (Kanazawa: col. 11 lines 5 – 11; col. 12 lines 43 – 48; col. 17 lines 31 – 38); wherein the selection of the interactive mode by the user causes the apparatus to read the startup markup document from the computer-readable storage medium and execute the preloading instructions to preload the markup document into the buffer of the apparatus (Kanazawa: col. 11 lines 5 – 11; col. 12 lines 43 – 48; col. 15 lines 34 – 56; col. 17 lines 31 – 38).

CONTACT INFORMATION

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LI B. ZHEN whose telephone number is (571)272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sub Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2194

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Li B. Zhen/
Primary Examiner, Art Unit 2194